

A BOBBIN FOR A WASHING UNIT IN A PRINTING PRESS

Field of the Invention

The present invention relates to a bobbin for a
5 cleaning cloth in a washing unit for a cylinder in a
printing press.

Background of the Invention

A washing unit is used in a printing press for
cleaning one or more cylinders therein, especially the
10 blanket cylinder. The cleaning means is a cleaning cloth,
preferably wetted by a cleaning liquid. In a cleaning
operation the cleaning cloth is applied in a stationary
condition against the cylinder to be cleaned, which is
rotating.

15 The cleaning cloth is supplied stepwise from a supply
roll thereof in the washing unit to a return roll for used
cloth. Each roll comprises a replaceable bobbin on a
washing unit shaft. A fresh bobbin with unused cleaning
cloth rolled thereon is supplied from a supplier, and the
20 used cloth can be discarded in a roll on the bobbin.

In this way it will be a very quick and simple
operation to provide the washing unit with a new cleaning
cloth, and the dirtied cloth may be easily handled in the
roll on the bobbin without contact with the dirt. There is
25 no need to disassemble the dirty cloth from the bobbin.

In order to guarantee the proper function of the
washing unit, no relative movements between on one hand the
bobbin and its shaft and on the other hand the bobbin and
the cloth shall be allowed.

30 The Invention

This proper function is according to the invention
obtained in that the bobbin is provided with internal means
for rotationally locking it to its shaft and with external
means for preventing sliding tangential movements between
35 the cloth and the bobbin.

Preferably, the bobbin is provided with internal, longitudinal or axial projections for cooperation with corresponding longitudinal grooves in the shaft and is embossed over at least a part of its circumferential surface.

Alternatively or additionally, the cloth may be held to the bobbin by means of serrated clips.

In this way the bobbin is held in its intended position, i.e. it can not rotate on its shaft if the cloth is exposed to a pulling action due to friction during the cleaning operation, and the cloth in turn is held to the bobbin when exposed to said pulling action.

The Drawing

The invention will be described in further detail below under reference to the accompanying drawing, in which Fig 1 is a perspective view of a washing unit for a cylinder in a printing press, Fig 2 is a side view of a bobbin for use in the washing unit, and Fig 3 is an end view of the bobbin of Fig 2 with a shaft therefore shown in section.

Detailed Description of a Preferred Embodiment

As is well known in the printing art, a washing unit 1 may be arranged in the vicinity of a cylinder, for example a blanket cylinder, in a printing press for the purpose of cleaning the cylinder by means of a cloth in the washing unit. When the cylinder is to be cleaned, the washing unit 1 is applied with its cloth against the circumferential cylinder surface; in this stage washing liquid is preferably supplied to the cloth.

The washing unit 1 is known *per se* and is accordingly only briefly described and to the extent necessary for a proper understanding of the invention.

A cleaning cloth 2 is arranged over a pad 3 at a front end of the washing unit 1 to be brought into engagement with the cylinder to be cleaned. The cloth 2 may

be stepwise unrolled from a cloth supply roll 4 and again be rolled up after use on a cloth return roll 5.

Each cloth roll 4, 5 comprises a bobbin 6 (Figs 2 and 3) on a conditionally rotatable shaft 7 (only shown in Fig 3) in the washing unit 1. The shafts with their bobbins may be released from the washing unit 1 by locking means 8 for cloth replacement.

A clean cloth portion is stepwise supplied from the supply roll 4 to the pad 3, before the washing unit 1 is applied to the cylinder to be cleaned. The used cloth is transferred to the return roll 5.

When the entire cloth supply is used-up and the cloth 2 has been gathered on the return roll 5, the bobbin 6 with the used cloth is removed on its shaft 7 from the washing unit and discarded. A new bobbin with a clean cloth is supplied as a supply roll 4 in the proper place in the washing unit, and a new empty bobbin, to which the end of the clean cloth is attached, is mounted in the position for the return roll.

The bobbin 6 is essentially a tube, preferably made of plastic material. The tube has an inner diameter corresponding to the outer diameter of the shaft 7 on which it is to be arranged and a length adapted to the width of the cloth 2.

As is visible in Fig 3, the bobbin 6 is provided with internal, longitudinal or axial projections 6' for cooperation with corresponding longitudinal grooves 7' in the shaft 7. The purpose of this arrangement is to keep the shaft 7 and bobbin 6 from relative rotatable movements during operation.

Also, the bobbin 6 is preferably embossed over at least a part of its circumferential surface in order to prevent relative movements between the cloth 2 and the bobbin during operation.